

SEQUENCE LISTING



<110> Vasta, Gerardo R.

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<120> Assay for Perkinsus in Shellfish

<130> 4115-137 CIP

<140> US 09/771,935

<141> 2001-01-30

<150> US 08/900,117

<151> 1997-07-25

<150> US 60/023,345

<151> 1996-07-26

<160> 19

<170> PatentIn version 3.1

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<211> 1150

<212> DNA

<213> Perkinsus marinus

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tgacttgcag gtgggtataa aagttgatgt aggccatgtg gctcgatttc aaccatatgg 300  
gtatgcttct gaggatgggg tgttacagtg gaccatatga ggtaggtcat ttggagatgt 360  
caccaaatg gtctaaatct gcgcattcca tttaagtga tttaagtga atttaagtga 420  
attttactta aaattgacct ttttcgttgc gcagatttgg ggtggtgatg ggtgacgcgg 480  
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<210> 2

<211> 1550

<212> DNA

<213> Perkinsus sp.

<220>

<221> gene

<222> (1)..(1550)

<223> The nucleotide sequence of the NTS of rRNA of *P. andrewsi*, isolated from *Macoma balthica*.

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ggacaacgaa cccaaacccg acaacattgt ccaggggggat aggggggtgaa aaagcagtgc      240
cggcaaagtc gaaagatgtc aagttggaat gcgggtcaaa ttcgtcattt gtgtaaatcc      300
gcaattttgc caatgtgcaa ttttgcaaat gtgcaatttt gcaaattgtc aattttgcca      360
atgtgcaatt ttgcaaattgc gcaattttgc aaatccgcaa ttttgcaaat gtgcaatttt      420
ggaaaatcac caaatgaaaa tcgtccaagt cgaattggag gcgtggtgac atgggtcccg      480
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gttttggtgaa attttgagtc tgaaaaaaaa aattgcaaat gcgcaaaggg ggtgaaggaa      600
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aaaaattggt gcaaattgcgc ttttgttatt tggccgggtt attggtgtca aaagttgcct      720
ggggtggtta cacaatgcac ggaattgggt ggaagttgtg tgattgaaaa ttggtcgtgt      780
cacacaattt tgcgcatttg caaaaattcg caaattggac aaaaaagggt cgcgcacagt      840
caaattgcgc aaatttcaact ttgaagttag tgcgcatttg tggggcagaa atgtggtgac      900
agcatcgttt ttataataa atattctata tttagtatct ttattataat ttgctgtcac      960
caatcaccat tttagaattt ttattttttt atgttttagt gaccgcggga ttttttgcaa     1020
agtactattg tgatgtttga gttgtttgaa atgggcaatt tagaacatca tcagaaatcg     1080
ctgaatagtg atttttgagt ttgactgttt gaagtgtttt ggggtattcgg cagctgccaa     1140
atcggtcagc gtcgaatata atagcatttt tgtgtgtata tgatatttag cgatatcatt     1200
ggaatcatgg ggttttgtat tagtaccgcg tcattgtggg aatgtcgggt ggttcaatat     1260
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attgcacatt ttgctgata taaacgtgat catctgagca cgcttcgact cttggatata 1500  
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<210> 3

<211> 1413

<212> DNA

<213> Perkinsus sp.

<220>

<221> gene

<222> (1)..(1413)

<223> The nucleotide sequence of the NTS of rRNA of Perkinsus mackini,  
isolated from Mercenaria mercenaria.

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tgtcaatttt gacagtgtgt gaaaaaactg aaaaagtcca ctcaacattg cattatgcaa 180  
tttgccactc aacattgtcc agggggatag ggggtgaaaa agtatcgag tccaactgaa 240  
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caattttggc aaagtttttg agtttcgcac ttttcgcaa tttcgtgtct gaaaaaaaaa 420  
tttcaacttt gcgcaaagg gtcaaaggga aaaaaagcac cctcaaaagg aaatttcct 480  
ttaatcccct ttgaaaaaaaa tgcgcaaagt taaatttgcg aaaatttoga ttttctcata 540  
tgaccgatta gttggtgcca gatggtagtc gggatggta cacggtgcac ggaactcgtt 600  
ggaagttctg gagttacgaa ttggtcccgt caccacaatt tgcgcatttt tgaaattgcg 660  
caaatttgcg aaaaaagcag cgcgcaaagt taaattgtgc gaaaattgac tttcaggctg 720  
gtgcgcaaatt ttggggtgaa aaagtgggtga cagcatcaga attataataa ataactata 780  
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tatgttttag tgaccgcggt attttttcca gagtactatc gtgatgtctg agttgtctaa	900
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ctcattgtgg gaaagtcggg tggttcaata tcacctgcaa atttaataca ggatttgc	1140
gatgcagcga ctgaccggg ttagtataat agctgattat tcggcttatt atgcagacct	1200
atcgtgttag tagttgcgac tcttggcgtg aaccggaaga ccggaacttg atttcgacta	1260
tttacgtccg taacacgtcc gtaaacagga gatttcaaga atattgcaca tttgtgtga	1320
tataatcgtg atcatctgag cagccttcga ctcttgaata tttgttaaac aaccgatatt	1380
cgggagctcg caagcattgc aattgatgca atc	1413

<210> 4

<211> 21

<212> DNA

<213> Perkinsus marinus

<220>

<221> misc\_feature

<222> (1)..(21)

<223> Forward primer (5'-3').

<400> 4

cacttgtatt gtgaagcacc c

21

<210> 5

<211> 21

<212> DNA

<213> Perkinsus marinus

<220>

<221> misc\_feature

<222> (1)..(21)

<223> Reverse primer (5'-3').

<400> 5  
ttggtgacat ctccaaatga c

21

<210> 6

<211> 20

<212> DNA

<213> Perkinsus marinus

<220>

<221> misc\_feature

<222> (1)..(20)

<223> Forward primer (5'-3').

<400> 6  
atgctagccc atagaacagt

20

<210> 7

<211> 20

<212> DNA

<213> Perkinsus marinus

<220>

<221> misc\_feature

<222> (1)..(20)

<223> Reverse primer (5'-3').

<400> 7  
atgctagccc acatcacagc

20

<210> 8

<211> 22

<212> DNA

<213> Perkinsus atlanticus

<220>

<221> misc\_feature

<222> (1)..(22)

<223> Forward primer (5'-3')

<400> 8  
atgctatggg tgggtgcgga cc

22

<210> 9

<211> 20

<212> DNA

<213> Perkinsus atlanticus

<220>

<221> misc\_feature

<222> (1)..(20)

<223> Reverse primer (5'-3')

<400> 9  
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20

<210> 10

<211> 24

<212> DNA

<213> Perkinsus sp.

<220>

<221> misc\_feature

<222> (1)..(24)

<223> NTS7 forward primer (5'-3') for Perkinsus andrewsi

<400> 10  
aagtcgaatt ggaggcgtgg tgac

24

<210> 11

<211> 20

<212> DNA

<213> Perkinsus sp.

<220>

<221> misc\_feature

<222> (1)..(20)

<223> NTS6 reverse primer for Perkinsus andrewsi

<400> 11  
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<210> 12

<211> 19

<212> DNA

<213> Perkinsus sp.



<220>

<221> misc\_feature

<222> (1)..(19)

<223> Generic forward primer (5'-3') PER1 for *P. marinus*, *P. atlanticus*  
and *P. andrewsi*.

<400> 12  
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19

<210> 13

<211> 17

<212> DNA

<213> *Perkinsus* sp.

<220>

<221> misc\_feature

<222> (1)..(17)

<223> Generic reverse PER2 primer (5'-3') for *P. marinus*, *P. atlanticus*  
and *P. andrewsi*

<400> 13  
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17

<210> 14

<211> 22

<212> DNA

<213> *Perkinsus* sp.

<220>

<221> misc\_feature

<222> (1)..(22)

<223> Forward SSU3F primer (5'-3') for *P. andrewsi*

<400> 14  
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22

<210> 15

<211> 22

<212> DNA

<213> Perkinsus sp.

<220>

<221> misc\_feature

<222> (1)..(22)

<223> Forward SSU4F primer (5'-3') for P. andrewsi

<400> 15  
accaggtcca gacataggaa gg

22

<210> 16

<211> 712

<212> DNA

<213> Perkinsus sp.

<220>

<221> misc\_feature

<222> (1)..(712)

<223> A nucleotide sequence of the ITS1-5.8. S ITS2 regions of P. andre  
wsi

<400> 16  
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60

120

ccaattgtac tagtctaaag tatccaatat ccttttggat tttggtat	180
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cgataagcac tgcgatttgc agaattccgt gaaccagtag aaatctcaac gcatactgca	300
caaaggggat ttatcctctt tgtacataca tatcagtgtc gctcttcttc ccgatacaaa	360
cattttgttg atttacaatc aacattatgc tttgtatccc gcttggattc ctttattggg	420
atccgctgtg tgcgcttgct gacacaggcg cattaatttg caaggctata atactactgt	480
actgtagccc cttcgcaaga aggactgcgc tagtgagtat ctttggatgc tcgcaactc	540
gactgtgttg tggttgattc cgtgttcttc gatcacgcga ttcacgctt caacgcatta	600
tgtcaaat	660
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<210> 17

<211> 1808

<212> DNA

<213> Perkinsus sp.

<220>

<221> misc\_feature

<222> (1)..(1808)

<223> A nucleotide sequence of the SSU rRNA of P. andrewsi

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ttggtgattc ataata	300
ttctgacct	360
gggaattagg gttcgattcc ggagagggag cctgagaaac gactaccaca tctaaggaag	420
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<210> 18

<211> 1147

<212> DNA

<213> Perkinsus atlanticus

<220>

<221> misc\_feature

<222> (1)..(1147)

<223> A nucleotide sequence of the NTS of rRNA of *P. atlanticus*

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<210> 19

<211> 19

<212> DNA

<213> Perkinsus sp.

<220>

<221> misc\_feature

<222> (1)..(19)

<223> Generic forward PER1 primer (5'-3') for P. marinus

<400> 19  
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